

1	CACAGACAGGCTCTTAACTGTTTATATCACTCACTTGGGAAAGTGTCTCAAGCTGTTCTA
51	CAAATCCATGCAAAGGCCGTTTAAAAATAGCAGCGAAGGTCCTGGACTCGGTCTCCA
121	GCACAGCCCCTTGGCTCTCTCTCTGGGCTCTGGCCGCCTGGCCCCGGGGACCCACACGA
181	GGTCATGGCGTGCTTCGGGCAGGGGGGGGGGGATCCCATAGACACCTCAGCTCCTTAAGA
241	GTTCTCCGCCTGGGCCAGGACGAGCATGGGGGTCCCCACTGATGCCCGAGACAGTGCCCC
301	TGTGTGTGTGAGCCCTCGACCCACATAACAGAGAGGTGTCCTGATGCCCTCTCTC
861	${\tt CAGGTGGATCTAGGATCCGGCTTCCAAC} \underline{{\tt ATG}} {\tt TGGCAGCTCTGGGCCTCCCTCTGCTGCCT}$
21	GCTGGTGTTGGCCAATGCCCGGAGCAGGCCCTCTTTCCATCCCGTGTCGGATGAGCTGGT
81	CAACTATGTCAACAAACGGAATACCACGTGGCAGGCCGGGCACAACTTCTACAACGTGGA
41	${\tt CATGAGCTACTTGAAGAGGCTATGTGGTACCTTCCTGGGTGGG$
01	${\tt AGTTATGTTTACCGAGGACCTGAAGCTGCCAAGCTTCGATGCACGGGAACAATGGCC}$
61	${\tt ACAGTGTCCCACCATCAAAGAGATCAGAGACCAGGGCTCCTGTGGCTCCTGCTGGGTAAG}$
21	${\tt GCCCTGCTGGCTGGGGGAAGCGCTGGAGAGAAGTGGGAGCAACACTGGAGAGTCTTG}$
81	${\tt GGGGATTCGGGGGGGGACAACTCTGACAAGGCAAGTTATAGAAACTTTCTGAGTCCCAG}$
81	$\tt TTTCCATCAGTACAAAAATCACAATCCCTCTGGCCATGAA\underline{TGA} \tt TGGCGAGGATTAGGTGG$
41	${\tt AGTGGCGGGCAGAGCAGCAGATTGCAAGTCCACGTGTACAGGTGGCGAAGCAGCTC}$
01	$\tt CCTTTCCCTGACATGCTGGCCCGTCCGCAAATACCAGGAGCTCTCACTGCTACTCTGCTT$
61	${\tt CAAGAAAGCATCCCTTTAGTGTCAGTGAGCTGTCTTAATTTTGTCATTTAATTGTGGTAA}$
021	${\tt AATACACGTAACAGAAATGTAATAATCTTAGCAATCTTCTTTTTTTT$
081	ւրդուրդուրդություն

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- 1 MWQLWASLCCLLVLANARSRPSFHPVSDELVNYVNKRNTTWQAGHNFYNVDMSYLKRLCG
- 61 TFLGGPKPPQRVMFTEDLKLPASFDAREQWPQCPTIKEIRDQGSCGSCWVRPCWLVGKRW
- 121 RESGSNTGESWGIRGGDNSDKASYRNFLSPSFHQYKNHNPSGHE



1	TCCAAGTCCTGGATGAGCTCGGAAGACACGTGCTGCTGCGGAAGGACTGTGGCCCAGTGG
61	${\tt ACACCAAGGTTCCAGGTGCTGGGGAGCCCAAGTCAGCCTTCACTCAGGGCTCAGCC} \underline{{\tt ATG}} {\tt ACACCAAGGTTCCAGGGGTGCTGGGGGGGGGGGGGGGGG$
121	TTTCTTCTCTGTCCCAAAACCATCCAGACAACAGAAACGAGACTTTCAGCTCAGTCATTT
181	${\tt CCCTGTTGAATGAGGATCCCCTGTCCCAGGACTTGCCTGTGAAGATGGCTTCAATCTTCACCCTGTGAAGATGGCTTCAATCTTCACCCTGTGAAGATGGCTTCAATCTTCACCCTGTGAAGATGGCTTCAATCTTCACCCTGTGAAGATGGCTTCAATCTTCACCCTGTGAAGATGGCTTCAATCTTCACCCTGTGAAGATGGCTTCAATCTTCACCCTGTGAAGATGGCTTCAATCTTCACCCTGTGAAGATGGCTTCAATCTTCACCCTGTGAAGATGGCTTCAATCTTCACCCTGTGAAGATGGCTTCAATCTTCACCCTGTGAAGATGGCTTCAATCTTCACCCTGTGAAGATGGCTTCAATCTTCACCCTGTGAAGATGGCTTCAATCTTCACCCTGTGAAGATGGCTTCAATCTTCACCCTGTGAAGATGGCTTCAATCTTCACCCTGTGAAGATGGCTTCAATCTTCACCCTGTGAAGATGGCTTCAATCTTCACCCTGTGAAGATGGCTTCAATCTTCACACCCTGTGAAGATGGCTTCAATCTTCACACCCTGTGAAGATGGCTTCAATCTTCACACCCTGTGAAGATGGCTTCAATCTTCACACCCTGTGAAGATGGCTTCAATCTTCACACCCTGTGAAGATGGCTTCAATCTTCAATCTTCACACCCTGTGAAGATGGCTTCAATCTTCAATCTTCACACCCTGTGAAGATGGCTTCAATCAATCTTCAATCAATCTTCAATCTTCAATCTTCAATCTTCAATCAATCTTCAATCTTCAATCTTCAATCAATCTTC$
241	AGAACTTTGTCATTACCTATAACCGGACATATGAGTCAAAGGAAGAAGCCCGGTGGCGCC
301	${\tt TGTCCGTCTTTGTCAATAACATGGTGCGAGCACAGAAGATCCAGGCCCTGGACCGTGGCACAGAAGATCCAGGCCCTGGACCGTGGCAAGAAGATCCAGGCCCTGGACCGTGGCAAGAAGATCCAGGCCCTGGACCGTGGCAAGAAGATCCAGGCCCTGGACCGTGGCAAGAAGATCCAGGCCCTGGACCGTGGCAAGAAGATCCAGGCCCTGGACCGTGGCAAGAAGATCCAGGCCCTGGACCGTGGCCAAGAAGATCCAGGCCCTGGACCGTGGCCAAGAAGATCCAGGCCCTGGACCGTGGCCAAGAAGATCCAGGCCCTGGACCGTGGCCAAGAAGATCCAGGCCCTGGACCAGAAGATCCAGGCCCTGGACCAGAAGATCCAGGCCCTGGACCAGAAGATCCAGGCCCTGGACCAGAAGATCCAGGCCCTGGACCAGAAGATCCAGGCCCTGGACCAGAAGATCCAGGCCCTGGACCAGAAGATCCAGGCCCTGGACCAGAAGATCCAGGCCCTGGACCAGAAGATCCAGAAGATCCAGGCCCTGGACCAGAAGATCCAGAAGATCCAGGCCCTGGACCAGAAGATCCAGAAGATCCAGAAGATCCAGAAGAAGATCCAGAAGAAGATCCAGGCCCTGGACCAGAAGAAGATCCAGAAGAAGATCCAGAAGAAGATCCAGAAGAAGATCCAGAAGAAGAAGATCCAGAAGAAGAAGATCCAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAATCAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAG$
361	${\tt CAGCTCAGTATGGAGTCACCAAGTTCAGTGATCTCACAGAGGAGGAGGTTCCGCACTATCTCAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG$
421	ACCTGAATACTCTCCTGAGGAAAGAGCCTGGCAACAAGATGAAGCAAGC
481	$\tt GTGACCTCGCCCCACCTGAATGGGACTGGAGGAGTAAGGGGGGCTGTCACAAAAGTCAAAGGTCAAAGGTCAAAGGTCAAAGGTCAAAAGTCAAAAGTCAAAAGTCAAAAGTCAAAAGTCAAAAGGTCAAAAAGGTCAAAAAAGGTCAAAAAGGTCAAAAAGGTCAAAAAGGTCAAAAAAGGTCAAAAAGGTCAAAAAAGGTCAAAAAAGGTCAAAAAAGGTCAAAAAAGGTCAAAAAAGGTCAAAAAAGGTCAAAAAGGTCAAAAAAGGTCAAAAAGGTCAAAAAAGGTCAAAAAGGTCAAAAAGGTCAAAAAGGTCAAAAAGGTCAAAAAGGTCAAAAAGGTCAAAAAAGGTCAAAAAAGGTCAAAAAGGTCAAAAAGGTCAAAAAAGGTCAAAAAAGGTCAAAAAAGGTCAAAAAAGGTCAAAAAAAA$
541	${\tt ACCAGGGCATGTGTGGCTCCTGCTGGGCCTTCTCAGTCACAGGCAATGTGGAGGGCCAGT}$
601	${\tt GGTTTCTCAACCAGGGGACCCTGCTCTCTCTGAACAGGAGCTCTTGGACTGTGACAGGGAGCTCTTGGACTGTGACAGGAGCTCTTGGACTGTGACAGGAGCTCTTGGACTGTGACAGGAGCTCTTGGACTGTGACAGGAGCTCTTGGACTGTGACAGGAGCTCTTGGACTGTGACAGGAGCTCTTGGACTGTGACAGGAGCTCTTGGACTGTGACAGGAGCTCTTGGACTGTGACAGGAGCTCTTGGACTGTGACAGGAGCTCTTGGACTGTGACAGGAGCTCTTGGACTGTGACAGGAGCTCTTGGACTGTGACAGGAGCTCTTGGACTGTGACAGGAGCTCTTGGACTGTGACAGGAGCTCTTGGACTGTGACAGGAGCTCTTGGACTGTGACAGGAGCTCTTGGACTGTGACAGGAGCTCTTGGACAGGAGCTCTTGGACAGGAGCTCTTGGACAGGAGCTCTTGGACAGGAGCTCTTGGACAGGAGCTCTTGGACAGGAGCTCTTGGACAGGAGCTCTTGGACAGGAGCTCTTGGACAGGAGCTCTTGAACAGGAGCTCTTGGACAGGAGCTCTTGGACAGGAGCTCTTGAACAGGAGCTCTTGGACAGGAGCTCTTGAACAGGAGCTCTTGGACAGGAGCTCTTGAACAGGAGCTCTTGAACAGGAGCTCTTGAACAGGAGCTCTTGAACAGGAGCTCTTGAACAGGAGCTCTTGAACAGGAGCTCTTGAACAGGAGCTCTTGAACAGGAGCTCTTGAACAGGAGCTCTTGAACAGGAGCTCTTGAACAGGAGCTCTTGAACAGGAGCTCTTGAACAGGAACAGGAGCTCTTGAACAGGAACAGGAAGAGCTCTTGAACAGGAACAGGAACAGGAACAGGAACAGGAACAGGAACAGGAAGAGCTCTTGAACAGAGAAGAGAGAG$
661	${\tt AGATGGACAAGGCCTGCATGGGCGGCTTGCCCTCCAATGCCTACTCGGCCATAAAGAATT}$
721	TGGGAGGGCTGGAGACAGAGGATGACTACAGCTACCAGGGTCACATGCAGTCCTGCAACT
781	TCTCAGCAGAGAGGCCAAGGTCTACATCAATGACTCCGTGGAGCTGAGCCAGAACGAGC
841	${\tt AGAAGCTGGCAGCCTGGCCAAGAGAGAGGCCCAATCTCCGTGGCCATCAATGCCTTTG}$
901	GCATGCAGTTTTACCGCCACGGGATCTCCCGCCCTCTCCGGCCCCTCTGCAGCCCTTGGC
961	${\tt TCATTGACCATGCGGTGTTGCTTGTGGGCTACGGCAACCGCTCTGACGTTCCCTTTTGGGGCTACGGCAACCGCTCTGACGTTCCCTTTTGGGGGCTACGGCAACCGCTCTGACGTTCCCTTTTGGGGGCTACGGCAACCGCTCTGACGTTCCCTTTTTGGGGGCTACGGCAACCGCTCTGACGTTCCCTTTTTGGGGGCTACGGCAACCGCTCTGACGTTCCCTTTTTGGGGGCTACGGCAACCGCTCTGACGTTCCCTTTTTGGGGGCTACGGCAACCGCTCTGACGTTCCCTTTTTGGGGGCTACGGCAACCGCTCTGACGTTCCCTTTTTGGGGGCTACGGCTACGGCAACCGCTCTGACGTTCCCTTTTTGGGGGCTACGGCTACGGCAACCGCTCTGACGTTCCCTTTTTGGGGGCTACGGCTACGGCAACCGCTCTGACGTTCCCTTTTTGGGGGCTACGGCAACCGCTCTGACGTTCCCTTTTTTGGGGGCTACGGCTACGGCAACCGCTCTGACGTTCCCTTTTTGGGGGCTACGGCAACCGCTCTGACGTTCCCTTTTTTGGGGCTACGGCAACCGCTCTGACGTTCCCTTTTTTGGGGCTACGGCAACCGCTCTGACGTTCCCTTTTTTGGGGCTACGGCAACCGCTCTGACGTTCCCTTTTTTGGGGCTACGGCAACCGCTCTGACGTTCCCTTTTTTGGGGCTACGGCAACCGCTCTGACGTTCCCTTTTTTGGGGCTACGGCAACCGCTCTGACGGCAACCGCTCTGACGGCAACCGCTCTGACGGCAACCGCTTCTGACGGCAACCGCTCTGACGGCAACCGCTTCTGACGGCAACCGCTTCTGACGGCAACCGCTTCTGACGGCAACCGCTTCTGACGGCAACCGCTTCTGACGGCAACCGCTTCTGACGGCAACCGCTTCTGACGGCAACCGCTTCTGACGGCAACCGCTTCTGACACACAC$
1021	${\tt CCATCAAGAACAGCTGGGGCACTGACTGGGGTGAGAAGGGTTACTACTACTTGCATCGCGGGGGGGG$
1081	${\tt GGTCCGGGGCCTGTGGCG}{\underline{TGA}}{\tt ACACCATGGCCAGCTCGGCGGTGGTGGACTGAAGAGGGGGGGG$
1141	$\tt CCCCCAGCTCGGGACCTGGTGCTGATCAGAGTGGCTGCCCCAGCCTGACATGTGTCCCCCAGCCTGACATGTGTCCCCCAGCCTGACATGTGTCCCCCAGCCTGACATGTGTCCCCCAGCCTGACATGTGTCCCCCAGCCTGACATGTGTCCCCCAGCCTGACATGTGTCCCCCAGCCTGACATGTGTCCCCCAGCCTGACATGTGTCCCCCAGCCTGACATGTGTCCCCCAGCCTGACATGTGTCCCCAGCCTGACATGTGTCCCCCAGCCTGACATGTCCCCCAGCCTGACATGTCCCCCAGCCTGACATGTCCCCCAGCCTGACATGTCCCCCAGCCTGACATGTCCCCCAGCCTGACATGTCAGCAGCTGACATGTCAGATGTCAGATGTCAGATGTCAGATGTCAGATGTAGATGAT$
1201	AGGCCCTCCCCGGGAGGTACAGCTGGCAGAGGGAAAGGCACTGGGTACCTCAGGGTGAG
1001	CA CA COCCA OTTCCCCCCCCCCCCCCCCCCCCCCCCC



1 MIS	SLSQNHPDNRNET	FSSVISLLNEDPLS(QDLPVKMASIFKNF	VITYNRTYESKEEARV
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- 61 RLSVFVNNMVRAQKIQALDRGTAQYGVTKFSDLTEEEFRTIYLNTLLRKEPGNKMKQAKS
- 121 VGDLAPPEWDWRSKGAVTKVKDQGMCGSCWAFSVTGNVEGQWFLNQGTLLSLSEQELLDC
- 181 DKMDKACMGGLPSNAYSAIKNLGGLETEDDYSYQGHMQSCNFSAEKAKVYINDSVELSQN
- 241 EOKLAAWLAKRGPISVAINAFGMQFYRHGISRPLRPLCSPWLIDHAVLLVGYGNRSDVPF
- 301 WAIKNSWGTDWGEKGYYYLHRGSGACGVNTMASSAVVD

(I''') [''']	1	atgtcgtgcg	tcaagttatg	gcccagcggt	gcccccgccc	ccttggtgtc	catcgaggaa
	61	ctggagaacc	aggagctcgt	cggcaaagac	gggttcggca	cagtgttccg	ggcgcaacat
	121	aggaagtggg	gctacgatgt	ggcggtcaag	atcgtaaact	cgaaggcgat	atccagggag
	181	gtcaaggcca	tggcaagtct	ggataacgaa	ttcgtgttgc	gcctagaagg	ggttatcgag
	241	aaggtgaact	gggaccaaga	tcccaagccg	gctctggtga	ctaaattcat	ggagaacggc
	301	tccctgtcgg	ggctgctgca	gtcccagtgc	cctcggccct	ggccgctcct	ttgccgcctg
	361	ctgaaagaag	tggtgcttgg	gatgttttac	ctgcacgacc	agaacccggt	gctcctgcac
	421	cgggacctca	agccatccaa	cgtcctgccg	gacccagagc	tgcacgtcaa	gctggcagat
	481	tttggcctgt	ccacatttca	gggaggctca	cagtcaggga	cagggtccgg	ggagccaggg
	541	ggcaccctgg	gctacttggc	cccagaactg	tttgttaacg	taaaccggaa	ggcctccaca
	601	gccagtgacg	tctacagctt	cgggatccta	atgtgggcag	tgcttgctgg	aagagaagtt
	661	gagttgccaa	ccgaaccatc	actcgtgtac	gaagcagtgt	gcaacaggca	gaaccggcct
	721	tcattggctg	agctgcccca	agccgggcct	gagactcccg	gcttagaagg	actgaaggag
	781	ctaatgcagc	tctgctggag	cagtgagccc	aaggacagac	cctccttcca	ggaatgccta
T N	841	ccaaaaactg	atgaagtctt	ccagatggtg	gagaacaata	tgaatgctgc	tgtctccacg
	901	gtaaaggatt	tcctgtctca	gctcaagagc	agcaatagga	gattttctat	cccagagtca
	961	ggccaaggag	ggacagaaat	ggatggcttt	aggagaacca	tagaaaacca	gcactctcgt
	1021	aatgatgtca	tggtttctga	gtggctaaac	aaactgaatc	tagaggagcc	tcccagctct
	1081	gttcctaaaa	aatgcccgag	ccttaccaag	aggagcaggg	cacaagagga	gcaggttcca
	1141	caagcctgga	cagcaggcac	atcttcagat	tcgatggccc	aacctcccca	gactccagag
	1201	acctcaactt	tcagaaacca	gatgcccagc	cctacctcaa	ctggaacacc	aagtcctgga
	1261	ccccgaggga	atcagggggc	tgagagacaa	ggcatgaact	ggtcctgcag	gaccccggag
	1321	ccaaatccag	taacagggcg	accgctcgtt	aacatataca	actgctctgg	ggtgcaagtt
	1381	ggagacaaca	actacttgac	tatgcaacag	acaactgcct	tgcccacatg	gggcttggca
	1441	ccttcgggca	aggggagggg	cttgcagcac	ccccaccag	taggttcgca	agaaggccct
	1501	aaagatcctg	aagcctggag	caggccacag	ggttggtata	atcatagcgg (gaaataa

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1 MSCVKLWPSGAPAPLVSIEELENQELVGKDGFGTVFRAQHRKWGYDVAVKIVNSKAISRE
61 VKAMASLDNEFVLRLEGVIEKVNWDQDPKPALVTKFMENGSLSGLLQSQCPRPWPLLCRL
121 LKEVVLGMFYLHDQNPVLLHRDLKPSNVLPDPELHVKLADFGLSTFQGGSQSGTGSGEPG
181 GTLGYLAPELFVNVNRKASTASDVYSFGILMWAVLAGREVELPTEPSLVYEAVCNRQNRP
241 SLAELPQAGPETPGLEGLKELMQLCWSSEPKDRPSFQECLPKTDEVFQMVENNMNAAVST
301 VKDFLSQLKSSNRRFSIPESGQGGTEMDGFRRTIENQHSRNDVMVSEWLNKLNLEEPPSS
361 VPKKCPSLTKRSRAQEEQVPQAWTAGTSSDSMAQPPQTPETSTFRNQMPSPTSTGTPSPG
421 PRGNQGAERQGMNWSCRTPEPNPVTGRPLVNIYNCSGVQVGDNNYLTMQQTTALPTWGLA

481 PSGKGRGLQHPPPVGSQEGPKDPEAWSRPQGWYNHSGKZ

| WT | Apop3(1-436) | Apop3(1-251) | Apop3(1-196) | Apop3(K50D) | Apop3(82-518) | Apop3(287-518) | Apop3(287

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